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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,599	12/04/2003	Yong Yang	11419-003-999	2559
31013	7590	12/27/2005		
			EXAMINER	
			RONESI, VICKEY M	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/728,599	YANG ET AL.	
	Examiner	Art Unit	
	Vickey Ronesi	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 October 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 58-101 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 58-101 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 October 2005 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/11/05.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. All outstanding rejections are withdrawn due to canceling of all previously active claims in the amendment filed 10/18/2005. Furthermore, applicant's arguments regarding the terms "tint base," "substantially," "low-shear," and "high-shear" are considered to be sufficient to overcome the 35 USC 112(2) issue addressed in the Office action mailed 7/11/2005.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed 10/18/2005. In particular, claims 53-101 are new. Thus, the following action is properly made final.

Claim Objections

4. Claims 100 and 101 are objected to because the phrase "in effective amount" is grammatically incomplete and should read as "in an effective amount."

Claim Rejections - 35 USC § 112

5. Claims 100 and 101 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "in effective amount" is a relative term which renders the claim indefinite. The term "in effective amount" is not defined by the claim, the specification does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102/103

6. Claims 58-62, 65, 68-71, 74, 78, 79, 81-90, and 92-99 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sonnabend (US 4,384,096).

Sonnabend discloses polymeric thickeners containing 15-60 wt % ethylenically unsaturated carboxylic acid monomer (col. 3, lines 27-53), 15-80 wt % of a nonionic ethylenically unsaturated monomer such as a mixture of vinyl acetate, ethyl methacrylate, butyl acrylate, and methyl methacrylate (col. 3, lines 54 to col. 4, line 27), and 1-30 wt % of a vinyl surfactant ester such as one with a C₈-C₂₀ alkoxy(poly(ethyleneoxy)ethyl acrylate (col. 4, line 28 to col. 5, line 9)--wherein the thickener is prepared by conventional emulsion polymerization (col. 6, lines 6-46) and wherein one or mixture of two more thickeners (col. 9, lines 31-32) are used in aqueous-based paints which contain pigment (col. 9, lines 38-43). Exemplified paints are in cols. 13 and 14 and comprise water, surfactant (e.g., Triton and Dowfax), pigment (e.g., calcium carbonate and titanium dioxide), oxygenated solvent (e.g., ethylene glycol and glycol ether), and a tint base (i.e., latex binder).

Sonnabend, does not expressly disclose the properties relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint, nevertheless, since Sonnabend discloses the presently claimed composition, it is the examiner's position that it is inherent that composition of Sonnabend exhibit the presently claimed properties since such

properties are evidently dependent upon the nature of the composition used. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Sonnabend anticipates the presently cited claims.

Alternatively, the presently claimed properties relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint would obviously have been present once the Sonnabend product is provided and thus leads to the presently cited claims.

7. Claims 58-62, 65, 68-71, 74, 78, 79, 81, 82, 84-90, 92, 93, and 95-99 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hawe et al (US 4,892,916, cited on IDS filed 12/4/2004).

Hawe et al discloses polymeric thickeners containing 10-70 wt % vinyl acid monomer such as acrylic acid, methacrylic acid, and itaconic acid (col. 4, line 45 to col. 5, line 18), 15-80 wt % vinyl monomer such as mixtures of vinyl acetate and alkyl acrylates (col. 5, lines 18-43), and 5-30 wt % surfactant monomer (col. 5, line 47 to col. 6, line 12, e.g., octylphenyl as endgroup R in Table 1a)--wherein the thickener is prepared by emulsion polymerization with an emulsifier (col. 7, lines 37-46) and is used in latex paints and pigment pastes (col. 8, lines 43-52). Improved thickening is observed when other surfactants are used in combination with the thickener (col. 8, lines 20-32). The exemplified paint comprises the thickener, a tint base (i.e., binder), water, oxygenated solvent (e.g., hexylene glycol), pigments (e.g., titanium dioxide, calcium carbonate, and talc) (Example 6, col. 16). The exemplified printing paste comprises the thickener, binder and pigments (Examples 8-10, cols. 18-20).

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Hawe et al, does not expressly disclose the properties relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint, nevertheless, since Hawe et al discloses the presently claimed composition, it is the examiner's position that it is inherent that composition of Hawe exhibit the presently claimed properties since such properties are evidently dependent upon the nature of the composition used. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Hawe et al anticipates the presently cited claims.

Alternatively, the presently claimed properties relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint would obviously have been present once the Hawe et al product is provided and thus leads to the presently cited claims.

8. Claims 58-65, 68-74, and 78-99 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chang et al (US 4,138,381, cited on IDS filed 12/4/2004).

Chang et al discloses polymeric thickeners (col. 2, line 49 to col. 3, line 2) containing 10-98 wt % unsaturated carboxylic acid of 3-6 carbons (col. 3, lines 3-10), 1-50 wt % at least one alkyl acrylate or alkyl methacrylate wherein the alkyl has 1-30 carbons; and 1-85 wt % ester (i.e., surfactant) monomer (col. 3, lines 11-48)--wherein thickener is prepared by solution polymerization glycol solvents (col. 3, line 65 to col. 4, line 23) and dispersed in a solvent (col. 5, lines 27-35), and the thickener is used in paints containing polymeric latices, pigments, solvents, and other thickeners (col. 5, line 36 to col. 6, line 29). The thickener is used to improve

sag resistance and flow and leveling (col. 5, lines 62-64). An exemplified paint comprises pigment (e.g., titanium dioxide), anionic surfactant, nonionic surfactant, oxygenated solvent (e.g., ethylene glycol), tint base (i.e., binder), and additional thickener (e.g., sodium polycarboxylate) (col. 6, line 34 to col. 7, line 55).

Chang et al, does not expressly disclose the properties relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint, nevertheless, since Chang et al discloses the presently claimed composition, it is the examiner's position that it is inherent that composition of Chang exhibit the presently claimed properties since such properties are evidently dependent upon the nature of the composition used. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Chang et al anticipates the presently cited claims.

Alternatively, the presently claimed properties relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint would obviously have been present once the Chang et al product is provided and thus leads to the presently cited claims.

Claim Rejections - 35 USC § 103

9. Claims 58-60, 63-65, 68-69, 72-74, 77-81, 84-92, and 95-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US 5,874,495, cited on IDS filed 10/11/2005).

Robinson discloses a thickener that is a copolymer (abstract, col. 10, lines 15-62) comprising 15-60 wt % acrylic or methacrylic acid or mixtures thereof (col. 4, lines 1-11), 15-80

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wt % C₂-C₁₂ α,β-ethylenically unsaturated monomer (col. 4, lines 12-42); and 1-30 wt % ethylenically unsaturated nonionic biphilic monomer such as tristyrylpoly(ethyleneoxy) methyl acrylate (col. 2, lines 41-67). At least one thickener can be used in both aqueous and solvent coating systems containing pigments and synthetic latex such as those in col. 7, lines 12-23 (col. 6, line 60 to col. 7, line 47).

While Robinson fails to exemplify a color composition or a paint containing its thickener, it is considered that it would have been obvious to one of ordinary skill in the art to utilize the thickener in either an aqueous or solvent-based coating composition containing a pigment and a tint base for a paint given that Robinson teaches the use of its thickener in such compositions, whereby the presently claimed properties of relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint would be intrinsically met and thereby arrive at the presently cited claims.

10. Claims 65-67 and 74-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonnabend (US 4,384,096), Hawe et al (US 4,892,916), Chang et al (US 4,138,381, or Robinson (US 5,874,495), any one of which in view of Carpenter et al (US 5,527,614).

The discussions with respect to Sonnabend, Hawe et al, Chang et al, and Robinson in paragraphs 6, 7, 8, and 9, respectively, above are incorporated here by reference.

None of Sonnabend, Hawe et al, Chang et al, or Robinson discloses the specific inorganic and organic pigments like presently claimed; however, Sonnabend teaches that conventional pigments are added to the latex coating compositions (col. 9, lines 38-42), Hawe et al teaches that conventional pigments may be added to the aqueous latex paints (col. 8, lines 46-48), Chang

et al teaches that conventional pigments are included in its list of pigments (col. 6, lines 3-15), and Robinson teaches that the latex compositions contain pigments (col. 7, lines 35-37).

Carpenter et al discloses pigment dispersion for use in aqueous paints and teaches pigments generally known in the art in col. 8, lines 15-34 (e.g., metallized and non-metallized azo reds) and that the chosen pigment depends on the desired color (col. 8, lines 35-38).

Given that Sonnabend, Hawe et al, Chang et al, and Robinson are open to the use of conventional pigments, it would have been obvious to one of ordinary skill in the art to utilize the known pigments as taught by Carpenter et al in either composition of Sonnabend, Hawe et al, Chang et al, or Robinson to obtain a composition with a desired color and thereby arrive at the presently cited claims.

Response to Arguments

11. Applicant's arguments filed 10/18/2005 have been fully considered but they are not persuasive. Specifically, applicant argues that the cited references are devoid of any teaching that a colorant composition in accordance with the invention will exhibit a viscosity stabilization effect or a paint composition with the advantageous flow/leveling properties and gloss characteristics.

With respect to the argument, first note that the claims are to a composition and thus a reference containing the presently claimed ingredients, whether described as a colorant composition or a paint composition, reads on the presently claimed invention. Second, viscosity stabilization properties recited in the claims are considered to be inherent or at least intrinsic in the cited references since these references discloses specific embodiments of applicant's

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invention and would have those properties given that a composition and its properties are inseparable. Third, the properties are not positively in the claim and does not have to be explicitly disclosed or suggested by the prior art references.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/20/2005

vr



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